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AUTHOR Belloni, Loretta T.
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ABSTRACT

In a study designed to discover whether interest in reading materials influenced a student's comprehension, 47 seventh grade students, reading one to two grade levels below their grade placement, were assigned a self selected story of high interest and a story of low interest. The 12 short story selections were assembled on the basis of research on adolescent reading interest. Cloze tests were administered immediately following the reading of each story. Two scores were obtained for each student, one on the high interest passage and one on the low interest passage. The analyses of variance confirmed that mean cloze scores on the high interest stories were significantly higher than on the low interest passages for the total group. The experiment indicated that interest is a significant factor affecting comprehension, and the results imply that students can comprehend material written at higher levels than what may normally be presented to them when interest in that material is present. (Author/JF)

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THE RELATIONSHIP OF READING INTERESTS TO READING COMPREHENSION FOR LOW-ACHIEVING ADOLESCENTS

A Thesis

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of
Master of Arts

in

The Department of Elementary and Secondary Education

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by
Loretta T. Belloni
B.A., Louisiana State University in New Orleans, 1963
May, 1976

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ABSTRACT

Purpose. The purpose of this study was to examine the relationship of reading interest to reading comprehension for low-achieving adolescents in the seventh grade. More specifically, the study sought to discover whether interest in the reading materials influenced a student's comprehension.

Methods. Twelve short stories were assembled on the basis of research on adolescent reading interests. The readability of the stories, which was assessed by two standard formulas, fell within a range of two to four grade equivalent levels above the mean ability level of the sample group. The sample of 47 seventh grade students, reading one to two grade levels below their grade placement, was randomly selected. The 25 girls and 22 boys self-selected one story of high interest and one story of low interest. Cloze tests, constructed according to a specific methodology, were administered immediately following the reading of each story. Two scores were obtained for each student, one on the high interest passage and one on the low interest passage. The mean cloze scores were statistically tested using an analysis of variance.

Results and Conclusions. The analyses of variance confirmed that mean cloze scores on the high interest stories were significantly higher than on the low interest passage for the total group ($p < .001$), for girls ($p < .001$), and for boys ($p < .01$). The experiment indicated that interest is a significant factor affecting comprehension about

the same way for boys and girls who are reading below their grade placement. The results imply that students can comprehend material written at higher levels than what may normally be presented to them when interest in that material is present.

CHAPTER I

INTRODUCTION

Background of the Problem

A general goal of American Education has historically been to facilitate independence in pursuit of knowledge. Alfred North Whitehead (1929) stated that interest is so crucial that there could be no mental development without it. He warned educators that without interest there would be no mental progress.

Although there is considerable agreement among educators that interest is one of the governing factors of comprehension, there have been relatively few studies which specifically examined the effect of high or low interest on a low-achieving students' reading comprehension. Sadly, interest is often overlooked as a prerequisite for comprehension, even though lip-service is given to its importance in the learning process. We are told that poor readers cannot comprehend reading material that does not hold their interest, but we are not told the extent to which interesting material affects the comprehension of the poor student who is reading below his grade placement.

No assessment is made of the interest value of the reading passages included in standardized tests upon which vital decisions concerning the student's ability are made. On the basis of those test scores, students are often grouped according to high, average,

or low ability and materials are presented to them for learning as well as for reading. The level of those materials is calculated by readability formulas which show no embarrassment in declaring that one of their limitations is lack of consideration for student interest, even though there is ample existing research which has ascertained patterns and areas of interest for each child's grade level, sex, and age. Few, if any, research studies have investigated the extent to which lack of consideration for interest affects the validity of the readability formulas.

Flesch (1951) was an exception to the list of researchers who constructed readability formulas without considering interest. As an innovator of readability formulas, his first formula in 1929 contained a method of calculating a high interest score as well as a score based on grammatical construction and difficult words. Users and developers of later formulas satisfied themselves with linguistic criteria and were content to wish away the value of the interest factor by stating that was one of their limitations.

In the classroom these pre-selected materials are used by students whose actual interest in them is rarely questioned save by the classroom teacher who has learned through experience that learning is facilitated by high interest in the materials.

Significance of the Study

Traditionally, the adolescent reader has been expected to perform learning tasks to the best of his ability using materials which rarely give the teacher, who is mediator of learning, any information about the quality of interest those materials contain. The

classroom teacher is expected to devise ways of promoting interest in materials that often defy her efforts.

It is accepted by educators that sex, in adolescence, is a strong determiner of interest patterns. It has been found that boys find girls books least interesting. Girls are more tolerant of so-called boys stories, but girls reject stories that appear to contain grim or gory content. A concerned teacher should be aware of interest patterns and their significance when selecting stories for classroom study. Considering the wealth of literature available, an adult who must select materials for adolescents should be knowledgeble about literature that is interesting to a particular age or sex group and should be aware of the consequences upon comprehension if interest is not suitable.

No consideration of interest is stated when passages for reading are included in tests which are determined to assess the ability of the reader. If interest is vital to comprehension, some consideration of interest patterns should be reflected in those passages upon which such vital decisions are made. It is not considered that the child who is assessed to be low level may show better performance in comprehension if the materials are more suited to his interests.

It is hoped that this study will add to the body of knowledge about the importance of interest in adolescent reading comprehension. Interest is an important prerequisite for all learning. Calculating ease or difficulty of reading is valuable, but in using readability formulas, more awareness of the ways in which limitations are set by interest is needed.

Leaving the factor of interest for the classroom teacher to handle alone is demanding and can be assisted by further research to reveal the significance of the interest factor as it affects the student's comprehension. Such insight can facilitate the performance of a teacher's duties.

Statement of the Problem

The purpose of this study is to discover if interest is indeed a significant contributing factor to reading comprehension for adolescents who are reading at least one grade level below their grade placement. Answers to the following questions will be sought:

1. Do low-achieving adolescents (boys and girls) comprehend short stories better when allowed to self-select the stories on the basis of reading interests?

2. Do low-achieving boys comprehend short stories better when allowed to self-select the stories on the basis of reading interests?

3. Do low-achieving girls comprehend short stories better when allowed to self-select the stories on the basis of reading interests?

Definition of Terms

The following terms are hereby defined as they will be used in this study:

Reading Interests. Reading interests are subjects or topics which readers actively pursue by reading (Getzels, 1956). Adolescents in this study chose two stories from a collection of stories to read; the individual adolescent chose stories to perform the active task of reading.

Reading Comprehension. Reading comprehension is, generally, part of the communicative process of reading in which the reader acquires meaning from the printed page by activating the sum total of his experiential background and ability. In this study comprehension will be evaluated by means of a cloze test.

Low-achieving Adolescents. The term low-achieving adolescents will be used to refer to those seventh grade students whose chronological ages range from 12 years to 14 years and who became participants in this study. They will be referred to as low-achieving because their reading ability, which was calculated prior to this study based on their Total Reading subtest score on the California Test of Basic Skills, level 2 form S, showed they were reading at least one grade level below their grade placement. The level 4.4 was used as a minimum cut-off point because it was thought that students whose scores were below that would introduce uncontrollable reading skill deficiency problems which would seriously interfere with their ability to perform the required task.

Assumptions and Limitations

The following assumptions and limitations are itemized for the present study:

1. It is assumed that the seventh grade students would understand the nature of the task in taking a cloze test after a brief training session.

2. It is assumed that the cloze procedure is a valid and reliable technique for assessing comprehension.

3. It is assumed that the seventh grade students could make accurate decisions based on looking at a story, reading its title, and reading a one or two sentence synopsis of the content of each story that would

reflect their actual interest once they had read the story.

4. It is assumed that when a student self-selects a story he will be reading he is pursuing an interest not merely stating a preference, although there may be overlap inherent in the concepts of preference and interest.

5. It is assumed that none of the students in the study had previously read any of the selections since they were not included in any of the textbooks currently in use in the school classrooms or in the school library.

6. The findings of this study are limited to the stories that were employed and are not generalizable to all stories.

7. It is assumed that the sample group is representative of low-achieving seventh grade students in the particular school that was used.

8. The findings of this study are limited to low-achieving seventh grade students and are not generalizable beyond the population from which the sample was drawn.

CHAPTER II

REVIEW OF THE LITERATURE

The review of the literature related to the present study is organized into the following sections: (1) a review of the methods used in other research of children's reading interests; (2) a review of the research of reading interests, including the factors which are usually considered to contribute to high or low interest in reading materials such as intelligence, age, sex, self-selection, race, and social class membership; (3) reading comprehension; (4) readability; and (5) relationship between reading interests and reading comprehension.

Reading Interest Research Methods

Research methods of determining interest show little variation. The following is a categorization of the methods:

1. Studies based on determining interest through paired comparison of book titles in which a student shows preference by choosing one over another. (Geeslin & Wilson, 1972; Goetz, 1973; Roderick, 1966).
2. Studies based on determining interest by free response questioning about books students have chosen to read by borrowing or purchasing. (Smith & Eno, 1961).
3. Reading Interest Inventories or checklists of book titles taken from the junior high school library catalog in which the pupil checks those thought to be interesting. This method compares the

books checked to the books actually checked out of the library and presumably read (Eberwein, 1973). Main categories of topics are then prepared and examined (Feely, 1974).

4. Questionnaires asking students to write in topics about which they most enjoyed reading. (Pollan, 1973) (Lauritzen, 1974).

5. Pre- or post-reading evaluations of the student's reaction to either a teacher-selected or a student-selected material and rating it according to an interest rating scale ranging from highly interesting to dull. (Norvell, 1973, Shnayer, 1968).

Limitations of interest studies have mostly revolved around the fact that there exists overlap of topics within the content of any literary selection. Overlap makes it difficult to pinpoint specific reasons why one topic is found interesting and another is not.

Reading Interest

George Norvell's book, The Reading Interests of Young People, which was first published in 1950, was updated with subsequent data in 1973. The recent edition presents a definitive survey of ratings of 4,933 reading materials made by boys and girls in grades seven through twelve. The students rated the selections according to whether or not they found the selection highly interesting. Norvell questioned 3,583 students in grades seven through nine. Pertinent to the present study is that these students were questioned about 364 selections of short fiction. It is because of Norvell's (1973) investigations that many of the stories in the present study were used. Norvell examined factors which might affect interest, distinctly

considering intelligence, age, and sex. Feely (1974) and Gesslin and Wilson (1972) considered and reported on self-selection, race, and social class membership as factors which might affect interest.

Intelligence. The research on intelligence as a factor affecting interest indicated that, ordinarily, students who were classified as superior, average, or low-achieving in reading were equally interested or disinterested in the same selections (Norvell, 1973). Shnayer (1968) examined the responses of 578 sixth graders in order to determine the relation between levels of interest and levels of comprehension. Group divisions were made on the basis of total reading comprehension standardized test subscores and matched with stories having readability scores two grades higher than the mean reading ability of the group. Shnayer (1968) asked the students to read 15 stories, rate each story on a four point interest scale, and answer questions of fact, sequence, and inference about each one. Examining the results for interrelation of reading interest and reading comprehension, Shnayer (1968) found that the difference between ability groups was highly significant regardless of the interest. Boys' comprehension scores were lower than girls' comprehension scores, although the reverse was true of three subgroups. The comprehension of high interest and low interest stories within a group also differed significantly ($p < .001$). Comprehension scores did vary as a function of both the ability of the reading group and the level of interest in the stories read. The effect of interest diminishes as ability increases. Further, low interest functions to differentiate between reading groups but high interest does not. The cumulative effect

of little or no interest becomes increasingly important.

Age. Norvell compared the results of five studies to summarize that changes in young people's interests between grades seven and twelve were less rapid than in the elementary grades. Evidence indicated that a literary selection which was well liked in a particular grade would usually be well liked two or three grades above or below it. Geeslin and Wilson (1972) examined the reading interests of boys and girls across age groups. Their research indicated no significant differences between eight and twelve year old boys; but, they found that twelve year old girls desired books at their own level and younger girls were interested in books at both the upper and lower levels. The only explanation they offered was that the older girls were reflecting a characteristic of adolescent culture.

Sex. Sex was identified as the most dominant force in determining young people's interests. In the elementary grades there is much overlap of interest regarding sex, but as children reach adolescence, their interests become sharply defined. Vaughan (1963), after distributing a questionnaire to 134 eighth grade students, remarked that above the primary grades, sex appeared to be more important than intelligence in determining reading interests.

Because it was established that adolescents base their decisions of interest on the content of materials (Smith & Eno, 1961), many researchers examined that content for discernible features or topics which determined interest for boys and for girls. Boys tend to say they are interested in grim or gory adventure involving conflict,

wild animals, sports, and stories with masculine heroes. Girls tend to say they are most interested in mild adventure, human relations, humor, mystery or suspense, romance, and domesticated animals. Girls seem to be more tolerant of the gender of a story's hero, but tend to avoid violence and grimness or morbidity. Most boys were absolutely intolerant of reading materials whose content dealt with feminine heroes or romance. (Norvell, 1973; Lauritzen, 1974; Ken, 1974; & Feely, 1974).

Feely (1974) sought to identify and describe print and television preferences of middle school children to determine whether those interest patterns were related to sex, race, or socioeconomic status. Feely used a fictitious list of titles and asked students whether they would read, watch, both read and watch, or do nothing about each title. The inventory of titles was administered to 250 boys and 282 girls in the fourth and fifth grades. His results allowed the following: (1) that sex continues to be a major determiner of middle-grade children's content interest, (2) that middle grade children prefer to watch rather than read, (3) interest patterns of black children closely resemble those of the general population, and (4) social class membership appears to influence children's interest in fantasy. Lower socioeconomic status children, especially girls, preferred fantasy significantly more than middle or higher socio-economic status children. Feely summarized his study's results by remarking

> "It would seem that classroom teachers of middle-grade children should provide an abundance of reading

> materials, newspapers, magazines, books, paperbacks, TV listings, that will satisfy the interest of both boys and girls. Certainly, consideration of the sex differences alone, should suggest to teachers that they allow children options in selecting content to read." (p. 1007)

Self-selection. A factor not identified by Norvell (1973), but mentioned in other studies (Feely, 1974; Geeslin & Wilson, 1972) was the effect of self-selection upon interest. Geeslin and Wilson found interest was highest when individual students were allowed to select their own materials for reading.

Daniel Fader (1972) in Hooked on Books stressed the importance of self-selection as he described his experiences with adolescent non-readers who, when allowed to select their own books, were able to master content which without the factor of interest would normally have been too difficult for them to comprehend.

One researcher (Gary, 1974) questioned adolescents directly for six years about what prompted their interest in reading. Some of the responses he cited were: ". . . allowed to browse around the library . . . picking out my own books . . ." (p. 705).

Roderick (1968) studied the question of whether or not more creative children differed from less creative children in reading preferences and choices and if the preferences agreed with a panel of authorities' predictions of them. The panel of authorities was composed of librarians and editors of juvenile books. The subjects were 124 sixth graders. He found a lack of agreement between the authorities' predictions and the actual preferences made by the children. The children judged the books by reading and rating

the titles. His conclusions were in agreement with an underlying theme of the literature on children's interest patterns; that is, children, not adults, are the best judges of what is most interesting to children.

Discussing the limitations of describing reading levels as independent, instructional, and frustrational, Hunt (1970) mentioned that high interest could motivate a student to pursue a difficult story to the point of transcending his frustrational level. The student might not comprehend all of the ideas in the story but he would get enough of the ideas to sustain his interest. The interest was facilitated by self-selection. Selecting the material himself insured personal interest that may have allowed him to transcend the usual limits of his ability.

Race and social class membership. Race was found not to be an important factor influencing interest (Feely, 1974). Social class appeared to influence interest in that children, especially girls, appeared to significantly prefer fantasy more than higher or middle socioeconomic strata children. No differences appeared significant for boys. Jerry Johns (1974) investigated whether inner-city children in the intermediate grades preferred to read stories which reflected stark inner-city settings and negative characters as opposed to pleasant middle class settings, and characters with positive self-concepts in positive group interactions. The preferences did not vary significantly with intelligence or with race.

Reading Comprehension

Reading comprehension, generally, is bringing and taking meaning to and from printed matter. It involves the reader's sociological and experiential background (Ken, 1974). The very nature of reading comprehension involves individual interest. It is described as a skill (Deighton, 1973) of the reading process which is best measured by observable behavior.

Kenneth Goodman (1971) contends that comprehension is the essence of the reading process. He contends further that the reading process cannot be fragmentized into constituent pieces or skills because it is operational only through the interrelationship of its parts. It is the sum of the parts which makes the reading process function. When reading or comprehension takes place, a reader with his oral language patterns and experiences, the writer with his oral language patterns and experiences expressed in written form, and the written language with a graphic system, a grammatical system, and a meaning system are too involved to separate.

Reading comprehension tests are included in reading ability assessments such as the diagnostic Informal Reading Inventory, standardized tests of academic achievement, and also classroom evaluations of subject matter such as criterion referenced tests.

Itemizing four basic prerequisites for comprehension, the Encyclopedia of Educational Research (Deighton, 1973) lists these following:

1. Adequately functional, perceptive and cognitive skills.

2. Sufficient prior experience related to the coded message.

3. Knowledge of the code of writing.

4. Motivation, purpose, and interest.

Assessment of comprehension is usually made through the following approaches: A free response questioning may be done but it could be limited by the value of the questions themselves. Objective testing may be done but it too could be limited by the value of the questions involved. The cloze procedure is a widely used method of assessing reading comprehension. The cloze procedure (Taylor, 1953; Bormuth, 1968) deletes words from passages thus testing a student's ability to render the passage back to the original. The cloze procedure correlates highly with answers to objective questions and with multiple-choice approaches to evaluating reading comprehension. The cloze procedure will be discussed further in the following section.

Comprehension as Assessed by Cloze

Taylor (1957) stated that the cloze procedure appeared to measure the influences of all factors that interact to affect comprehension between writers and readers. The assumption is made that the process of supplying the deleted word on a cloze passage requires the testee to use context, to recognize the interrelationships of language, and consequently to exercise his comprehension skills. The research shows that the processes measured by the cloze test items are so highly correlated with traditional comprehension test questions that the processes that generate those scores are indistinguishable (Bormuth, 1969). Cross-validation of cloze test

scores found that they correlated highly with traditional comprehension tests (Bormuth, 1962). Bormuth (1975) stated that the cloze procedure was an accurate and economical way to test students directly on the materials. He determined relationships between cloze scores and criterion scores which traditionally interpret students' performance on tests in terms of levels of frustration, instruction, or independence. When Bormuth (1975) made a rationale for relating the cloze scores to criterion scores, he based the rationale on four considerations: (1) information gained from the material; (2) rate of reading; (3) novelty of the content; and (4) willingness to read. Bormuth (1975) described willingness to read as interest in the material. He administered to a sample group one passage which students were to rate according to a seven point scale with seven representing "like very much" and one representing "dislike very much." The sample group rejected both very easy and very difficult materials. They preferred passages on which their cloze test scores fell into an intermediate range of difficulty. The preferences reached a peak well below a cloze score of 80 percent where information gain is at a maximum. The cloze scores of the sample group were within a range of 30 percent to 60 percent when interest was highest. Bormuth (1975) stated that the lowest level of acceptability for cloze scores is 35 percent. Students scoring below 35 percent exhibit less than a five percent information gain. Bormuth (1975) concluded that materials falling below that level are essentially worthless for teaching the student and should not even be presented. Materials on which cloze

scores are above the 35 percent score can be used for instruction with teacher guidance.

The researchers are not in perfect agreement with one another about the relationship of cloze test scores to criterion scores, but their work gives indications of the existing relationships. Burron and Claybough (1972) stated that 57 percent accuracy on cloze tests corresponds to an independent level of reading ability. A 44 percent to 57 percent cloze score corresponds to an instructional level of reading ability, and scores of 44 percent or below indicate frustation. Disagreement came from Bortnick and Lopardo (1972) as they found 55 percent to 65 percent cloze scores to correspond to independent reading ability levels, 45 percent to 55 percent to correspond to instructional levels, and 35 percent or below to indicate frustration. It was believed that the findings of this study might bear reflection upon these interpretations of cloze scores especially since Hunt (1970) had stated that the factor of interest could cause students to transcend their usual limit of frustration into an independent or instructional level.

Peterson and Carroll (1973) investigated whether or not the cloze technique could be used for predicting reading abilities in general. They assigned 21 sixth graders, 21 seventh graders, and 21 ninth graders to groups which read passages at their reading levels which ranged from 3.5 to 4.5. The three groups of students obtained mean cloze scores between 28 percent and 38 percent. Another sample group was composed of 35 sixth graders, 35 seventh graders, and 35 ninth graders. These groups read passages at their reading

levels which ranged from 4.5 to 6.5. These three groups of students obtained a mean cloze score of 41.88 percent. The difference suggests that the students with the greater reading ability had less problems handling the cloze technique. Their findings indicated to this researcher the appropriateness of using the cloze technique to assess the comprehension of the seventh grade low-achieving students in the present study who were reading at grade equivalent levels between 4.5 and 6.5

In summary, research has shown that the cloze procedure is a valid and reliable method of testing reading comprehension for low-achieving students.

Readability

Deighton (1973) described readability as the ease or difficulty of reading material. Readability is assessed through readability formulas which consistently count vocabulary and sentence length to determine a grade equivalent for description of the difficulty of the material. Additional aspects are included in different formulas. Readability formulas are also used in writing to provide easier reading, especially for the less educated or less skilled reader. However, readability researchers warn that the two uses should remain separate and distinct. They cautioned against the assessment of readability while writing was in progress.

Definitive comments on readability formulas are made by George Klare (1974-75) as he stated that there are three ways to tell

whether a particular piece of writing is likely to be readable for a particular group of readers. One is to guess, using skill developed over years of experience and feedback from readers, but he cautioned against limitations by subjectivity or human error of judgement on the part of the evaluator. Another method is to test comprehension, but this method is hampered by the time necessary to construct, refine, and administer a test. A third method is to utilize the readability formulas, but with awareness of the following limitations:

1. Formulas show no consideration of interest value of the materials.
2. Formulas show no indication of literary quality.
3. Formulas show no consideration of format or typography.
4. Formulas show no measure of idea density.
5. Formulas show no assessment of the logical organization and sequence of ideas (Flesch, 1951; Manzo, 1970).

In addition, it has been demonstrated that one readability formula may not have perfect cross validation with another formula. Inspite of these limitations some important information can be gained by measuring and counting the linguistic features of a passage. The limitations are abstractions and are very difficult to reliably test (Tibbetts, 1973), but they do exist and deserve consideration whenever the formulas are used. Most importantly to this study, interest deserves consideration. A study done by Smith and Johnson (1972) indicated a need for further research on how significantly readability formulas are affected by lack of consideration for interest. Smith and Johnson (1972) compared the

popularity of works of fiction among 265 12 year old students and related the most and least popularly read articles to the readability levels as acquired using the Flesch formula. The articles ranged in difficulty from fourth grade to twelfth grade. When the scores were plotted on a graph, popularity was shown to increase as difficulty increased.

One formula (Flesch, 1951) includes a separate score for interest which is calculated by counting personal pronouns, words that have gender, group words, personal sentences, exclamations, and grammatically incomplete sentences. To interpret the interest score, it is necessary to use the Flesch table which shows a hierarchical level ranging from dramatic to dull. The score can be interpreted according to a grade equivalent level. Flesch stated that he considered the interest score more important than the Reading Ease score because "If a reader is genuinely interested in what he is reading, he may be able to work his way through long sentences and difficult words. Reading ease simplifies the job of reading; but human interest provides motivation-which is more important." (pg. 41). The Flesch human interest score, if used by educators, is rarely reported when descriptions are written about any writing intended for classroom or test used.

Relationship between Reading Interests and Reading Comprehension

Five studies were found that pay particular attention to the relationships between reading interests and reading comprehension.

The Cornell six year experiment (Pauk, 1973) modified 120

adult-type articles to conform to reading levels ranging from fourth grade to twelfth grade. The articles were placed in ascending order of difficulty as ascertained by the Dale-Chall readability formula. Twenty comprehension questions were formulated for each article and tried out at the junior high level. It was generalized that the students were able to comprehend three grade equivalent levels beyond their school placement grade level because the mature subject matter of the articles held their interest so well that concentration was at an exceptionally high level, enabling them to comprehend at higher levels than predicted without difficulty.

In a related dissertation study, Robert Squire (1964) questioned 52 fifteen year old subjects on three levels of comprehension, literal, inferential, and critical after reading four short stories. Among his findings, he listed that intelligence and reading measures did not predict the quality of individual interpretations of the stories. The examiner stated that readers who became deeply involved or interested were more likely to consider the literary values of the stories.

Shnayer (1968) examined responses of 578 sixth grade pupils to determine the relationship between levels of interest and levels of comprehension. Students were required to read 15 stories with readability formulated scores two grades higher than the mean reading ability of the group. They then rated each story on a four point interest scale and answered comprehension questions of fact, sequence, and inference about each one. Comprehension was found to vary significantly as a function of interest in the stories read and the

ability of the readers. The effect of interest was found to diminish as ability increased. Further, low interest was found to function as a differentiator between high and low ability groups, but high interest did not. These results illustrate that the cumulative effect of little or no interest becomes increasingly important. No replication of this study has been done to date.

Estes and Vaughan (1973) were inspired by William Powell's (1971) critical comments about using Informal Reading Inventories to evaluate a pupil's reading ability when those tests give no consideration of the effect of interest upon comprehension of the passages the student is asked to read. Powell considered this failure especially sad in view of the vital decisions which were made on the basis of these and similar tests about a child and that a child could, with high interest, transcend the usual instructional zone.

Estes and Vaughan tested fourth graders by preparing an Informal Reading Inventory having one level of difficulty and including six passages of text each drawn from a known area of interest. Prior to reading, each pupil was asked to indicate six topics he felt most interested in reading about. The ten item questions for testing comprehension covered measures of retention of facts, inferences, main ideas, and vocabulary. The study statistically reaffirmed that interest appears to be a potent factor in determining reading comprehension.

A very pertinent study by Bernstien (1955) involved ninth grade students. Bernstien examined the relationship between reading interest and reading comprehension as two stories, one of high

interest and one of low interest were presented for reading. The stories were modified to range in difficulty from grade four to grade twelve, increasing by grade levels in difficulty per page of the six page story. The pupils were also asked to record the length of time taken to read the selection. Results showed that high interest was associated not only with comprehension, but also with greater rate of reading. Comprehension was significantly higher on the high interest story than on the low interest story for both boys and girls regardless of their ability level.

Summary

In summary, the literature shows that few interest studies do more than assess popularity of reading materials. They do indicate that on the junior high school level sex and self-selection of materials are major determinants of interest patterns. Research does indicate general topics of content interest, but few studies have investigated the way in which comprehension is affected by those content patterns of interest.

Research indicates that the cloze procedure is a widely used, valid and reliable instrument for assessing comprehension.

Readability formulas are limited in their qualitative value when they are used to assess a selection for suitability to a specific group. Formulas do not indicate interest value. There are indications that the one formula which does include an interest assessment is not widely used by educators, or if it is used, is rarely reported. The basis of standardized reading tests is comprehension of printed

matter in the reading; yet, test makers and users do not express concern for the quality of interest present in the reading matter of the tests.

Of the studies which have particularly related reading interests to reading comprehension, few, if any have been replicated. Research indicates that high interest appears to be most crucial for the low-achieving student in maintaining reading success. It is clear that more information is needed about the relationship between reading interest and reading comprehension, particularly for the low-achieving adolescent.

CHAPTER III

PROCEDURES

Population and Sample

The population consisted of 94 seventh grade students from a suburban middle school in Jefferson Parish, Louisiana who were found to be low-achieving in reading. The particular school was selected because it was thought to have an enrollment large enough to draw a sample of seventh grade students who would be representative of adolescents who were low-achieving in reading. Prior to the study it was decided to include only low-achieving seventh grade students because of their reluctance to read and a need for further research into ways of increasing their success, particularly through examination of the ways in which their interest in the materials they read affected their comprehension. It was decided to consider as low-achieving those students whose Total Reading subtest score on the California Basic Test of Skills, Level 2, form S, which had been administered during the previous school year to all students, fell between grade equivalent levels of 4.4 and 5.8. It was believed that those students were reluctant to read and exhibited some disabling reading skills. Those students for whom no Total Reading score was available were not included in the population.

The researcher identified the range of reading abilities of 4.4 to 5.8 in an attempt to eliminate from the population those students

whose reading skills were too proficient to be considered low-achievers. Also eliminated were those students whose reading skills might be too deficient to complete the task required in the experiment. A total of 94 students, 40 boys and 54 girls were found to have attained grade equivalent scores between 4.4 and 5.8.

A sample of 50 students was randomly selected and stratified according to sex to facilitate ease in administration and testing of selections to managable groups, collecting data, and comparing results by sex. The original sample groups consisted of 25 girls and 25 boys; however, because of absences due to illness, three boys were not able to complete the experiment. The final sample was reduced to 25 girls and 22 boys.

Design of the Study

A one-dimensional repeated measures research design was used in this study. Each student received both forms of the experimental treatment, that is, reading a high interest story and reading a low interest story.

A repeated measures design was chosen for the following reasons. First, because each student, in a sense, serves as his own control, this type of design is generally considered more powerful than the more commonly used randomized block design. Second, the use of repeated measures reduces the number of students needed which facilitates data collection in the field. Third, it was believed there would be no carry-over effect from one treatment to another. As a precautionary step, however, the order of presentation was determined randomly.

Selection of the Reading Materials

The underlying theme of the review of the literature on adolescents' reading interests was that individual interest was insured when the individual self-selected his own materials. Adolescents, not adults, were the best judge of what was interesting or not interesting. Research provided some titles of short stories and some descriptions of content which had been rated by adolescents according to their interest value. The researcher was able to assemble a collection of 12 short stories about which something from research was known. The assembly provided a variety from which the sample students could self-select one story they would find interesting and one story they would not find interesting. In assembling the stories the researcher identified the readability levels, determined the length, and checked the availability of the stories. The following sections will discuss the justifications for the inclusion of the particular stories according to (1) interest, (2) readability, (3) length, (4) availability.

Interest. Of the 12 short stories presented to the sample group, six had been identified by Norvell (1973) with ratings by junior high school boys and girls according to the percentages of students who found the selections they had read highly interesting. The remaining six stories were evaluated by the researcher in consideration of the literature which described topics of content boys and girls said they found to be of high or low interest. The stories were chosen from the following four categories:

1. Three stories were selected which were expected to be equally interesting to both boys and girls.

2. Three stories were selected which were expected to be interesting to girls and not to boys.

3. Three stories were selected which were expected to be interesting to boys and not to girls.

4. Three stories were selected which were expected to be not interesting to boys or girls.

Those stories expected to be interesting to girls were considered so because the content included female heroes and soft sentiments which were characteristics boys, in research, said were least interesting to them. Those stories expected to be interesting to boys were considered so because the content included grimness, wild animals, male sports figures, and violence which were characteristics girls in research said were least interesting to them. Complete references for the stories are given in Appendix A.

The three stories expected to be equally interesting to boys and girls were:

1. "The Night the Ghost Got In" by James Thurber (1967). This story was included because it was humorous. Humor had been mentioned more frequently by girls than boys but the researcher believed that fact was balanced in its appeal to boys because it contained a male hero and the element of mystery.

2. "The Fog Horn" by Ray Bradbury (1970). This story was included because it suited the category of science fiction, adventure, and mystery which were topics of interest for boys and girls.

3. "For the Love of a Man" by Jack London (1965). This story was included because the hero was a dog, the kind of animal most popular across sexes. In Norvell's (1973) study, the book from which it was originally included, Call of the Wild, was rated highly interesting by 90 percent of the boys and 89 percent of the girls.

The three stories expected to be highly interesting to girls and not to boys were:

1. "Her First Ball" by Katherine Mansfield (1932). This story was included because it was identified in Norvell's (1973) study as highly interesting to 87 percent of the girls and 58 percent of the boys. The story contained soft sentiments and a female main character. It involved a romantic setting.

2. "Road to the Isles" by Jessamyn West (1958). This story was included because it involved a female main character, her relationships with her parents, and with her best friend, and involved school. Those characteristics had been stated by boys to be least interesting. Norvell (1973) found that none of the boys rated it as interesting and more than half of the girls did. Smith and Eno (1961) found that adolescent girls favored stories about girls emotional reactions and interactions with parents and friends.

3. "Pony Penning Day" by Marguerite Henry (1967). This story was included because horse stories represented the type of animal story most popular with adolescent girls. Similar stories by the same author were included in a book of short stories, Misty of Chinocoteague, and were researched by Norvell (1973). Of the girls, 81 percent had rated the book highly interesting and none of the boys had rated it interesting. It was a mild adventure story without violence.

The three stories expected to be highly interesting to boys and not to girls were:

1. "The Second Rater" by Herbert Hagedon (1951). This story was included because it was a sports story. It had a male hero who behaved courageously. It was by an author who had been substantiated as being popular with boys. In Norvell's (1973) study, 87 percent of the boys who read a similar book by the same author rated it as highly interesting.

2. "War" by Jack London (1956). This story was selected because it involved conflict and adventure, violence and grimness. According to Norvell's study, 87 percent of the boys rated it highly interesting while 71 percent of the girls rated it highly interesting.

3. "Bauman's Tale" by Theodore Roosevelt (1970). This story was included because it satisfied the general research recommendations of content in that it was mysterious, contained a wild and violent animal, involved the sport of hunting, and had an all male cast. Those were characteristics research said were least interesting to girls and most interesting to boys.

The three stories expected to be not interesting to boys and not interesting to girls were:

1. "The Ambitious Guest" by Nathaniel Hawthorne (1937). This story was included because Norvell's (1973) study had identified it as being interesting to 56 percent of the girls and 61 percent of the boys. Furthermore, Bernstien (1955) had identified stories by the same author as being typically what adolescents do not find interesting. She had modified a Hawthorne story to use as her low interest story in her study.

2. "The Outcasts of Poker Flat" by Bret Harte (1899). This story was included because it was identified by Norvell's (1973) research as interesting to 64 percent of the boys and 58 percent of the girls.

3. "The Man and the Snake" by Ambrose Bierce (1967). This story was included because it included the kind of wild animal girls especially did not find interesting. It was thought boys would not find it interesting because there was an element of magic involved which boys had stated they found least interesting. A similar story by the same author had been rated in Norvell's (1973) study as interesting to 69 percent of the boys and 63 percent of the girls.

Readability. The readability level of each story was calculated using the Fry formula and the Dale-Chall formula as had been done in the Estes and Vaughan study (1973). The researcher believed it

necessary to include stories which ranged in difficulty one to two levels above the mean reading ability levels, expressed in grade equivalents, of the sample group, in order to see if children could as Powell (1971), Hunt (1970) and Fader (1972) suggested, comprehend materials written considerably beyond the reader's frustrational level. The present study attempted to determine whether the factor of interest could positively affect the comprehension of difficult materials. The Fry (1968) and the Dale-Chall (1948) formulas were both used to increase dependability of the derived readability level in view of known limitations upon the formulas identified by the review of the literature. The readability levels for each story are shown in Table 1.

Length. Some of the stories identified by Norvell's (1973) study which would have been ideal for the purposes of this study were found to be too lengthy to reasonably expect a low-achieving seventh grader to read within an hour. Those lengthy stories were eliminated. It was believed that a story not exceeding 5,000 words could adequately be read without pressuring the student with a time limit. The final assembly of stories ranged in length from 1,800 to 5,000 words. It was assumed that interest in content, not in length, would be what students would consider when making their selections. The length of each story expressed in number of words is shown in Table 1.

Availability. Some of the stories identified by Norvell's (1973) study which would have been ideal for the purposes of this study were inaccessible to the researcher. Some were found to be esoteric; some

were published before 1940 and were out of print; some were not in local libraries. The stories used in Norvell's (1973) study which were used in the present study represent the closest facsimile in subject, theme, or author that was available to the researcher.

Table 1

Descriptions of Reading Materials

Story Category	Fry Readability Estimate	Dale-Chall Readability Estimate	Approximate Number of Words
High Interest to Both			
"The Night the Ghost Got In"	7	7-8	2,700
"The Fog Horn"	6	7-8	3,200
"For Love of a Man"	7	7-8	2,400
High Interest to Girls			
"Her First Ball"	6	7-8	2,700
"Road to the Isles"	7	8-9	3,600
"Pony Penning Day"	8	8-9	3,200
High Interest to Boys			
"The Second Rater"	7	7-8	5,000
"War"	7	7-8	1,800
"Bauman's Tale	9	7-8	1,800
High Interest to None			
"The Ambitious Guest"	8	7-8	3,200
"The Outcasts of Poker Flat"	8	8-9	4,000
"The Man and the Snake"	7	8-9	1,800

Development of the Cloze Test

The cloze procedure was chosen because of its reliability and its high correlation with the questioning method of testing comprehension (Bormuth, 1975; Deighton, 1973). It is generally agreed by educators that the cloze procedure is a widely used and valid technique. It afforded ease of administration and quick calculation of the scores.

A passage of approximately two hundred and fifty words was extracted from the paragraphs nearest the mid point of the story. The procedure of deleting every fifth word from the passage was followed, counting hyphenated words as one word. This was found to be the most widely accepted type of cloze procedure because that method insured that a representative number of grammatical elements were deleted in each passage. Each cloze passage contained 50 deletions. Bormuth (1975) reported that less than 50 deletions tended to make a cloze test unreliable.

Each cloze test was reproduced, triple spaced, on standard eight and one-half by eleven inch paper. No written directions were included since they were given orally. Only the name of the short story from which the passage was extracted was used as title.

As a training session the researcher assembled the sample group to provide exercise and familiarity in completing cloze tests. The sample for the exercise consisted of a passage approximately 200 words in length and including three paragraphs. The title was "Help for Wild Horses." It was extracted and modified from Go: Reading in the Content Areas (Herber, 1973), a reading workbook at the fourth

grade reading level. The story contained ten deletions in the middle of three paragraphs with the beginning and final paragraphs intact. It was dittoed so that each student had his own copy on which to write. The sample cloze test was presented the day before reading and testing of the selected stories began.

The purpose of the training session was to insure familiarity with the nature of the cloze task in case it should be foreign to the group members. The researcher did not want the students' inability to understand the task to interfere with their performance on the cloze tests.

Determination of Reading Interests

For two days preceeding the testing days an interview session was held with each participating student individually for the purpose of choosing from the assembly of 12 stories one story which was highly interesting and one story which was not interesting for them to read in the experiment. The following standard set of directions was used with each student:

> "I have called you in today for the purpose of selecting two stories that you will read next week as part of the group for the experiment I am doing.
>
> First, I am going to ask you to look at all these stories and pick out one, just one, that you think would be very interesting for you to read. You may pick up the story, thumb through it, read the title and the description of the story which I have written to tell you, generally, what the story is about.
>
> Now that you have selected your most interesting story, would you go through the same process again, but this time, pick out a story that you think would not be interesting for you to read."

The students looked at the story which had been reproduced on bond paper and stapled into booklet form; they read the title, and a one to two sentence description of the story's content, written by the researcher, in order to make their decisions. See Appendix A for a reproduction of the synopses read by the students.

Assessment of Reading Comprehension

On the first day of testing, the researcher held two group sessions, one with only boys and one with only girls, for one and one-half hours duration. Session one was composed of 25 girls. The researcher randomly gave one half of the girls the story they had selected as highly interesting and one half of the girls the story they had selected as not interesting to read. In session two, composed of boys, the same procedure was followed. The reading was immediately followed by the administration of the cloze test especially prepared for each selection.

The following day, the second day of testing, the same basic procedure was followed but the order of reading the selections was reversed.

As much time as needed was allowed for each student to complete the reading and the cloze tests. At no time did the testing period exceed one and one half hours.

A third day of testing was necessary for the students who had been absent to complete their readings and testing.

In scoring the cloze tests only exact replacements of the deleted words were accepted as correct responses. Research indicated that acceptance of exact word replacements as opposed to acceptance of

synonyms was a more objective way of using the cloze procedure (Miller & Coleman, 1967). Bormuth (1975), Taylor (1953), and Rudell (1964) substantiated the theory that acceptance of synonyms would not significantly affect the derived total score earned by a testee. They considered it not worth the necessary time to consider synonyms. In the present study, exact word replacements were counted as correct with allowances made for recognizable misspellings. A raw score was recorded for each member of the sample group.

Data Analysis

An analysis of variance for repeated-measures designs, as suggested by Bruning and Kintz (1968), was the procedure used to test the difference between means from the high interest cloze tests and means from the low interests cloze tests. Three separate analyses of variance were planned corresponding to the three hypotheses of the study. One was conducted for girls, one for boys, and one for the total group.

Summary

In summary, the researcher allowed 47 randomly selected, low-achieving, seventh grade students, 25 girls and 22 boys to self-select one short story of high interest and one of low interest. After the stories were read, they were immediately followed by the administration of a cloze test for comprehension. The development of the cloze test was based on research of the most objective, reliable, and valid cloze style. Only exact word replacements with

allowances for recognizable misspellings were accepted as correct responses. Two cloze scores, a high interest score and a low interest score were recorded for each member of the sample group. An analysis of variance was conducted for girls, for boys, and for the total group following the three hypotheses of the study.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The analysis of data reported in this chapter was based on the results of 47 seventh grade low-achieving students who self-selected short stories according to their high and low interests and completed a cloze test of comprehension immediately following the reading. Each cloze test contained 50 deleted words requiring 50 exact word replacements. Each student's responses were calculated and cloze scores based on the high and low interest passages were separately recorded.

An analysis of variance was the procedure used to test the difference between means from the high interest cloze test and means from the low interest cloze tests.

Results of the Self-Selection

The present study provided the researcher with data on selections by sexes so that it was possible to compare and contrast the stories chosen by girls to the stories chosen by boys and to compare the choices of the students in this study with the literature. A summary of the student's selections can be found in Table 2.

An examination of the stories selected as highly interesting to girls revealed that more girls, 15 out of 25 or 60 percent, selected stories of high interest from the category thought to be interesting

to both boys and girls than they selected from the category thought to be interesting to girls alone.

Only four out of 22 or 18 percent of the boys selected stories from the category expected to be highly interesting to boys alone. Most boys, 13 out of 22 or 59 percent, selected stories from the category expected to be interesting to both boys and girls. Three out of 22 or 13 percent of the boys selected the same story "The Man and the Snake" (Bierce, 1967) as highly interesting, although it was expected to be not interesting to either boys or girls. Some girls, 13 percent, selected that story as not interesting.

Girls reflected research literature on interest patterns as they chose a least interesting story. The story "War" (London, 1956) was selected as not interesting by 11 out of 25 girls, or 44 percent. Four other girls out of 25 selected stories expected to be highly interesting to boys alone, bringing a total of 60 percent of the girls choosing their least interesting story from the category expected to be not interesting to girls but interesting to boys.

Boys reflected research literature on interest patterns in choosing a least interesting story. The story, "Her First Ball," (Mansfield, 1932) was chosen by 13 out of 22 or 59 percent of the boys as their least interesting story. Six other boys selected stories from the category expected to be interesting to girls and not to boys, bringing a total of 19 out of 22 or 86 percent of the boys' selections to be made there. This appears to be most reinforcing to the theory that boys are more intolerant of girls books or literature than girls are of boys literature.

Table 2

Summary of Students' Self-Selections of Reading Materials

Story Category	Girls' Selections		Boys' Selections	
	High Interest	Low Interest	High Interest	Low Interest
High Interest to Both				
"The Night the Ghost Got In"	6	1	5	0
"The Fog Horn"	3	2	6	0
"For the Love of a Man"	6	0	2	0
High Interest to Girls				
"Her First Ball"	4	0	0	13
"Road to the Isles"	2	1	0	5
"Pony Penning Day"	4	0	2	1
High Interest to Boys				
"The Second Rater"	0	3	0	0
"War"	0	11	1	1
"Bauman's Tale"	0	1	3	0
High Interest to None				
"The Ambitious Guest"	0	2	0	2
"The Outcasts of Poker Flat"	0	1	0	0
"The Man and the Snake"	0	3	3	0

Results of the Cloze Test

Table 3 shows the mean raw scores and the standard deviations derived from the cloze tests on the high and low interest stories for

girls, boys, and for the combined group.

Two findings are apparent from the results summarized in Table 3. First, students comprehended the high interest stories better than they comprehended the low interest stories. This was true of boys and girls. The difference was approximately four raw score points or eight percentage points. Second, there was very little difference between the boys' performance and the girls' performance. The lack of sex differences was expected since all students were selected for the study because they were low-achievers of approximately the same reading levels.

Testing the First Hypothesis

The statement of the problem as expressed in Chapter I was converted to the null hypothesis. The first null hypothesis was tested using an analysis of variance. It was stated as follows:

> There will be no significant difference between mean cloze test scores based on high interest reading materials and those based on low interest reading material for the total group of low-achieving boys and girls. ($p.<05$)

The F test of the difference between cloze test means was significant at the .001 level. The results indicated that the low-achieving total group comprehended the high interest passages significantly better than they comprehended the low interest passages. In Table 4 the results of testing the first null hypothesis are shown.

Testing the Second Hypothesis

The second null hypothesis was converted from the statement of the problem in Chapter I. It was tested using an analysis of variance. It was stated as follows:

> There will be no significant difference between mean cloze test scores based on high interest reading material and those based on low interest reading material for low-achieving seventh grade girls. ($p < .05$)

The F test of the difference between cloze test means was significant at the .01 level. Therefore, the null hypothesis was rejected. The results indicated that the low-achieving girls comprehended the high interest passages significantly better than they comprehended the low interest passages. In Table 5 the results of testing the second null hypothesis are shown.

Testing the Third Hypothesis

To test the third hypothesis an analysis of variance was used. The third null hypothesis was converted from the problem statement in Chapter I. It was stated as follows:

> There will be no significant difference between mean cloze test scores based on high interest reading material and those based on low interest reading material for low-achieving seventh grade boys. ($p < .05$)

The F test of the difference between cloze test means was significant at the .01 level. Therefore, the third null hypothesis was rejected. The results indicated that the low-achieving boys comprehended the high interest passages significantly better than they comprehended the low interest passages. In Table 6 the results of testing the third null hypothesis are shown.

The scores show only slight difference between the boys' and the girls' mean comprehension test scores for either the high or the low interest stories. Results show both sexes scored about the same when high interest was present and about the same when low interest

was present. There was a significant difference in comprehension scores for high interest stories when compared to comprehension scores when low interest was present.

Table 3

Cloze Test Means and Standard Deviations Based on High Interest and Low Interest Passages

	High Interest Passage		Low Interest Passage	
	Mean	Standard Deviation	Mean	Standard Deviation
Boys	19.40	6.53	15.90	5.85
Girls	19.64	4.25	15.40	6.59
Total	19.53	5.38	15.63	6.19

Table 4

Analyses of Variance of Cloze Scores for Low-Achieving Boys and Girls

Source	SS	df	Ms	F	p
Total	3454.82	93			
Subjects	2446.32	46			
Treatments	356.27	1	356.27	25.12	<.001
Error	652.23	46	14.18		

Table 5

Analysis of Variance of Cloze Scores for Low-Achieving Girls

Source	SS	df	Ms	F	p
Total	1702.48	49			
Subjects	1129.48	24			
Treatment	224.72	1	224.72	15.49	<.001
Error	348.28	24	14.51		

Table 6

Analysis of Variance of Cloze Scores for Low-Achieving Boys

Source	SS	df	Ms	F	p
Total	1751.89	43			
Subjects	1316.39	21			
Treatments	134.75	1	134.75	9.41	<.01
Error	300.75	21	14.32		

Summary of Findings

The research hypotheses of this study were investigated by cloze comprehension tests on the short stories self-selected to be of high and low interest and read by low-achieving seventh grade boys and girls. The readability levels were assessed to be considerably beyond the mean grade equivalent level for the reading ability of the sample group.

The results of the self-selection of stories by boys and girls show that out of the 47 adolescents in the sample 68 percent selected stories from the category expected to contain stories interesting to both sexes. Only 18 percent or four out of 22 boys in the study selected stories from the category expected to be interesting just to boys. Expectations of selections by sexes were otherwise fulfilled, as students made their choices of least interesting stories as is shown in Table 2.

The first null hypothesis was rejected. The F test of the difference between cloze test means was statistically significant at the $p < .001$ level. Both boys and girls comprehended the high interest stories significantly better than they comprehended the low interest stories.

The second null hypothesis was rejected. The F test of the difference between cloze test means was statistically significant at the $p < .001$ level. Girls comprehended the high interest stories significantly better than they comprehended the low interest stories.

The third null hypothesis was rejected. The F test of the difference between cloze test means was statistically significant at the $p < .01$ level. Boys comprehended the high interest stories significantly better than they comprehended the low interest stories.

CHAPTER V

SUMMARY AND CONCLUSIONS

Purpose of the Study

It was known that educators assign much importance to the factor of interest in any learning situation, particularly in reading. It was known that much research has been done to improve the quality of instruction for the disabled or reluctant reader. A review of the literature pertaining to students' reading interests showed that seldom has research been directed at probing the way in which the reluctant or low-achieving students' reading interests in the materials affect their reading comprehension. Much work has been done in identifying students' interests and relating interests to age, sex, intelligence, creativity, and socio-economic status, but few have specifically related the interests of low-achievers to comprehension. This study was undertaken in an attempt to add to that body of knowledge concerning the significance of interest on comprehension for the slightly disabled or low-achieving seventh grade adolescent.

The following research questions were explored in this study:

1. Do low-achieving adolescents (boys and girls) comprehend short stories better when allowed to self-select the stories on the basis of reading interest?

2. Do low-achieving girls comprehend short stories better when allowed to self-select the stories on the basis of reading interests?

3. Do low-achieving adolescent boys comprehend short stories better when allowed to self-select the stories on the basis of reading interests?

Methods and Procedures

From a population judged by their standardized test reading scores to be reading within one to two grade levels below their grade placement, a sample of 47 (22 boys and 25 girls) seventh grade adolescents was randomly selected. The sample was stratified according to sex. The students were allowed to self-select one high interest story and one low interest story from a collection of 12 short stories assembled by the researcher based on a stated methodology. The stories ranged in difficulty, as assessed by readability formulas, from two to four grade equivalent levels beyond the mean ability level of the group.

A cloze test of comprehension was constructed from a specific stated methodology and administered to each student immediately following the reading of each story. Two comprehension scores were obtained for each student, one on the high interest story and one on the low interest story.

The results of the cloze tests were used to test the null hypotheses using an analysis of variance.

Summary of Findings

The results show that more students of both sexes (68 percent) selected stories from a category expected to be of high interest to both boys and girls than either sex did from the category expected

to be interesting to any particular sex alone. The results showed that fewest boys (18 percent) selected stories from the category expected to be highly interesting just to boys.

The findings of the study parallel the research questions stated in the first section of this chapter:

1. There was a significant difference ($p < .001$) between mean cloze test scores based on self-selected high interest short stories and those based on low interest short stories for both low-achieving boys and girls.

2. There was a significant difference ($p < .001$) between mean cloze test scores based on self-selected high interest short stories and those based on low interest short stories for low-achieving girls.

3. There was a significant difference ($p < .01$) between mean cloze test scores based on self-selected high interest short stories and those based on low interest short stories for low-achieving boys.

Interpretations and Conclusions

The conclusions summarized below were based on the findings related to the rejection of the null hypotheses.

The results of this study indicate there is a significant difference in reading comprehension when high interest in the reading materials is present for low-achieving seventh grade boys and girls. Similar results were found by Estes and Vaughan (1973) using informal reading inventories, by Bernstien (1955) using stories which increased in difficulty per page of each story, Shnayer (1968) and Squire (1964) by using short stories and testing comprehension by the questioning method, and by Pauk (1970) using articles and the questioning method.

The findings of this study show that seventh grade low-achieving girls transcended their frustrational levels in reading the short stories they selected as highly interesting. The girls achieved mean increases from 30 percent to 39 percent bringing their comprehension into the instructional level according to Bormuth (1975) and Bortnick & Lopardo (1972) standards. Seventh grade low-achieving boys also showed mean increases from 31 percent to 38 percent bringing their comprehension into the instructional level. The total mean increases for the sample group increased 30 percent to 39 percent indicating that if they had not transcended their frustrational level, they at least had approached their instructional level.

The findings indicate that adults should use caution in selecting literature for adolescents. An adult who must select for groups of students may, with a background of information based on reading interests research, more reliably select literature that could be expected to be interesting to groups of boys and girls rather than to groups of boys alone. The results reinforce reading research on selection of materials by Roderick (1968) who found that a panel of authorities did not exactly predict what would be interesting to adolescents. The results reinforce reading interest research which stated that patterns of interest differentiate sexes on the adolescent level, but this study indicates most differentiation is in the area of chooshing least interesting reading materials, rather than in choosing highly interesting reading materials. Research was least reliable in identifying topics that would be interesting only to boys. Generally research was supported when it said the best judge of reading

interests was the adolescent reader himself.

Implications of the Findings

The implications of this study may be referred to the following groups of people: (1) to teachers of low-achieving boys and girls, (2) to test makers, (3) to teacher trainers, (4) to editors of juvenile books, magazines, and literary publications in general, (5) to any concerned adult who would select reading materials for adolescents, (6) to theorists and researchers of the cloze procedure, readability formulas, or reading interests.

1. Teachers of low-achieving boys and girls should be aware that self-selection of reading materials insures high interest in the materials. A variety of material from which an invidual student could select should be provided in the classroom. Teachers should be aware that certain topics of content are more interesting to only boys and some are more interesting to only girls. Avoiding topics of content that are equally uninteresting to either boys or girls could facilitate the performance of the teachers' duties in mediating learning.

2. Makers of standardized tests should be aware of the value of making statements about the quality of interest contained in the passages on which student's reading ability is assessed. The statements could be included in the descriptive literature which usually accompanies any standardized test so that the student's best effort is reflected in the score of his test.

3. Teacher trainers should instruct future teachers that consideration of interest in reading materials is important. It is worthwhile to evaluate how much interest students have in the reading passages contained in standardized tests, criterion referenced tests, or diagnostic tests. Future teachers should carefully consider interest when making readability judgements and, generally, when instructing children.

4. Editors of juvenile publications should continue to consider the interests of their readers to insure the success of their editions.

5. Any adult who would select reading materials for children should be aware and be cautious of the overlap of content topics within any given reading material which would affect the interest appeal to any individual. Identification of interest qualities are not positive and limit the validity of referring a selection to any particular individual.

6. Theorists and researchers of the cloze procedure who would relate cloze scores to criteria for frustrational, instructional, or independent levels of reading ability for students should know more about how the levels may be transcended and for how long and with what degree of teacher guidance before materials are eliminated from presentation to a particular group. Those who would use readability formulas to determine suitability of materials must consider interest before eliminating selections from a student's repertoire of choices on the basis of expected difficulty. Those who research the reading interests of adolescents should be aware that self-selection is the best guide to what is interesting or not interesting to adolescents.

Any concerned adult who would use readability formulas to determine suitability of materials for presentation to a particular population must consider interest before eliminating any reading selection from a student's repertoire of choices on the basis of expected difficulty.

Any concerned adult who would research the reading interests of adolescents should be aware that self-selection is the best guide to what is interesting or not interesting to adolescents.

Recommendations for Future Research

The findings of this study which indicate that the factor of interest does significantly contribute to increases in comprehension point to the following needs for future research:

1. It would be interesting to verify the results of this study through replication with another sample of seventh grade students or with students in different grades. A comparison could be done to see if the results were similar to the present study.

2. A replication of the present study could explore the possible effects that different stories with lower readability levels and different interest appeals in topics of content would have on the results. For the present study, stories assessed by formulas to be on grade levels of six to nine were used. It would be interesting to see if lower levels would result in higher increases on comprehension evaluations.

3. A future study could explore the statements of Powell (1971), Hunt (1970), and Fader (1972) that students can transcend levels of

frustration as increases in comprehension are made as a result of high interest in the materials. Research could specifically rate materials according to levels of frustration, instruction, and independence and relate comprehension of the materials directly to that criteria.

4. An assessment of the interest value of the passages included in standardized tests could be surveyed by direct questioning of the low-achieving adolescents who take the tests.

5. A future study could identify more specifically topics which are of equally high interest to boys and girls rather than any particular sex. It could identify topics of content that concerned adults would wish to avoid in making reading materials available to boys, to girls, and to both boys and girls.

6. A new insight believed to be found in this study may indicate that more research is needed in the area of reading interests on topics of content which are most interesting equally to boys and girls. Research abounds on topics most interesting to boys or girls but perhaps is more needed about the area where interests overlap especially since most classrooms are composed of groups of boys and girls.

Summary

The purpose of this study was to examine the relationship of reading interest to reading comprehension for low-achieving adolescents in the seventh grade. The members of the sample group, who were stratified according to sex, self-selected one short story of high interest and one short story of low-interest. The readability levels

of each story were calculated using a Fry formula and a Dale-Chall formula and were found to range two to four grade levels beyond the mean grade equivalent reading ability level of the sample group. Following immediately the reading of each story, a cloze test, constructed from a specific methodology, was administered. Two scores were obtained for each student, a high interest score and a low interest score which were statistically tested using an analysis of variance.

The mean cloze test scores of boys and girls on the high interest story and on the low interest story were found to be about the same indicating that the factor of interest was equally important for both sexes. There was a significant difference for both boys and girls ($p < .001$) between the mean cloze scores on the high interest stories and the mean cloze scores on the low interest stories. Interest in the reading materials was found to have a significant effect on the comprehension of low-achieving adolescents in the seventh grade.

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APPENDIX A

Appendix A

Bierce, A. The man and the snake. In E. Sechrist & J. Woolsey (Eds.), Terribly strange tales. Philadelphia, Pen.: Macrae Smith Co., 1967. Pp. 73-78.

This story is about a mysterious, maybe magic snake, and what he does to the houseguest of a scientist.

Bradbury, R. The fog horn. In B. Howes & G. Smith (Eds.), The sea-green horse. New York: Macmillan Co., 1970. Pp. 201-209.

This is a science fiction story about the sea, a monster, and two men in a lighthouse.

Hagedon, H. The second rater. In R. Pooley (Ed.), Exploring life through literature. Chicago, Ill.: Scott Foresman, 1957. Pp. 85-93.

This is a sports story about a boy who tries to live up to being the hero his father was when he attended the same school.

Harte, B. The outcasts of Poker Flat. The luck of roaring camp and other tales. Boston, Mass.: Houghton Mifflin, Co., 1899. Pp. 14-26.

Some undesirable people are sent out of the town of Poker Flat. They must make their way to another town through rough country during a cold winter.

Hawthorne, N. The ambitious guest. In N. Pearson (Ed.), The complete novels and selected tales of Nathaniel Hawthorne. New York: Random House, 1937. Pp. 990-996.

This is a story about a traveler who joins a family who live in a small hotel located in the pathway between dangerous mountains in New England.

Henry, M. Pony penning day. In B. Brown (Ed.), The wonderful world of horses. New York: Harper & Row, 1967. Pp. 120-133.

This is the story of a young boy, who for the first time, is allowed to join the men of the town as they round-up wild ponies.

London, J. War. In I. Shepard (Ed.), Jack London's tales of adventure. Garden City, N. Y.: Hanover House, 1956. Pp. 467-471.

This is a war story involving a young soldier who is sent out to scout the enemy on horseback in deep woods.

London, J. For the love of a man. In F. Reck (Ed.), Stories boys like. New York: Thomas Y. Crowell Co., 1965. Pp. 196-205.

This is the story of great devotion between a man and his dog while they are living in Alaska.

Mansfield, K. Her first ball. In M. Becker (Ed.), Under twenty. New York: Harcourt Brace & World, Inc., 1932. Pp. 277-283.

This story is about a 17-year-old girl from the country who attends her first formal dance in the city with her cousins.

Roosevelt, T. Bauman's tale. In B. Howes & G. Smith (Eds.), The sea-green horse. New York: Macmillan & Co., 1970. Pp. 210-215.

President Theodore Roosevelt tells a story told to him by a hunter named Bauman about his mysterious adventure with a savage beast.

Thurber, J. The night the ghost got in. In E. Sechrist & J. Woolsey (eds.), Terribly strange tales. Philadelphia, Pa.: Macrae Smith Co., 1962. Pp. 41-45.

This is a funny story about what can happen when strange noises are heard in the night, especially if one happens to live with a rather weird grandfather.

West, J. Road to the isles. In S. Manley (Ed.), Teenage treasury for girls. New York: Funk & Wagnalls Co., 1958. Pp. 107-119.

Cress Delantry learns much about her parents and her best friend while she is preparing to dance "Road to the Isles" in a school program.